

JANUARY 2004



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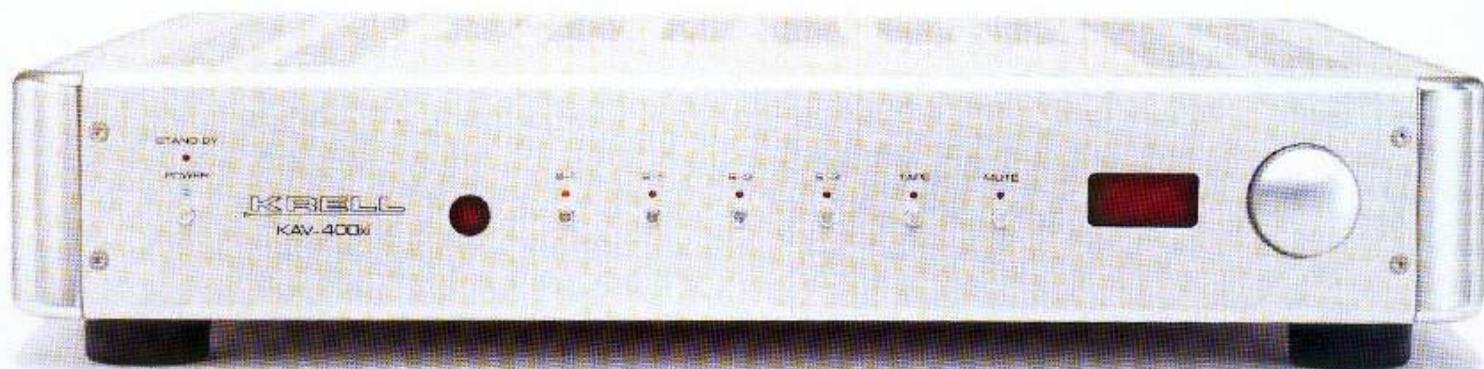
and how to use it



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Slim, beautiful, classy and maybe not so expensive!



For me at least the traditional Krell "sound" has typified very good detail resolution and sound staging but most of all a sense of effortlessness. That said most of my experiences have been with separate pre/power combinations so I was interested to see how their integrated amplifier would perform.



Perhaps before I start this review I should warn readers that I am a long-term fan of Krell products - after buying one of the first KSA-50 amplifiers imported into the UK during; well let's just say a long time ago. Krell's amplifiers have always been known for their over-engineered construction, from the same design school that brought you the M1 Abrams tank, and for their outstanding reliability; so you can expect them to run for two decades without the cover needing to be lifted. Because integrated amplifiers have always been less expensive than pre/power combinations there has always been an assumption that they are second best. Yet there is no theoretical reason why they should not perform equally well if not better given the absence of interconnects etc. between the two boxes. The KAV-400xi is Krell's latest amplifier and is a development of the KAV-300i which first appeared 8 years ago. In appearance this amplifier has their house style of heavy-duty aluminium extrusions and panels; the effect being more akin to an expensive scientific instrument rather than a piece of domestic electronics. The overall effect reminds me of the Italian actress Malisa Longo; slim; beautiful; classy and extremely expensive! Inside the electronics is based upon the FPB series of amplifiers using the proprietary current mode output circuitry which has real advantages in terms of bandwidth,

linearity and stability. Under the hood the space is dominated by a massive 750VA toroidal transformer in response to the old rule that you can't get out what you don't put in; and with a maximum output of 400 watts per channel this amplifier needs and gets an exceptional power supply. Looking around the circuits in my inevitable manner, I found components of first-rate quality together with neat assembly. Absolutely nothing to criticise and much to praise; so full marks for construction.

Balanced Class A circuitry is used throughout with a single XLR input connection supplemented by four sets of unbalanced line level inputs and a set of Tape connections. Channel balance can be adjusted and for home cinema enthusiasts there is a neat "Throughput" option which defaults the input gain to unity so that the surround sound processor becomes the main controller in the system. This is a neat and almost essential feature if you want to avoid degrading the movie soundtrack. The pre-amp signal is available from a pair of sockets (useful for bi-amping) and there is an RC-5 control input and pair of 12 volt control lines, both of which are only of interest to custom install engineers. One unexpected finding was of a speaker fuse under each pair of hefty binding posts. These 8 amp fuses are there to protect the amplifier in case of an accidental short-circuit of the outputs and in theory the fuses could blow if the amplifier was driving a 2 ohm load at a high level although we didn't experience any problems.

The Volume control is absolutely delicious both in feel and operation. The signal is actually attenuated by a bank of resistor networks in the best audiophile tradition but the whole process is digitally controlled and tied into the numeric display so you can see the setting at a glance. Two words of warning though. If you are using both the balanced and unbalanced inputs be prepared for an unnerving leap in volume when switching between them. This isn't an issue once you know about it, but it could be avoided. In the same vein, the level steps at the bottom of the volume range are a touch large for those who like to listen at low levels. This results from a design decision that every engineer is faced with and you can't please everybody all of the time. Personally if I had a Krell amplifier I wouldn't be playing my music quietly; but then I don't have any neighbours.

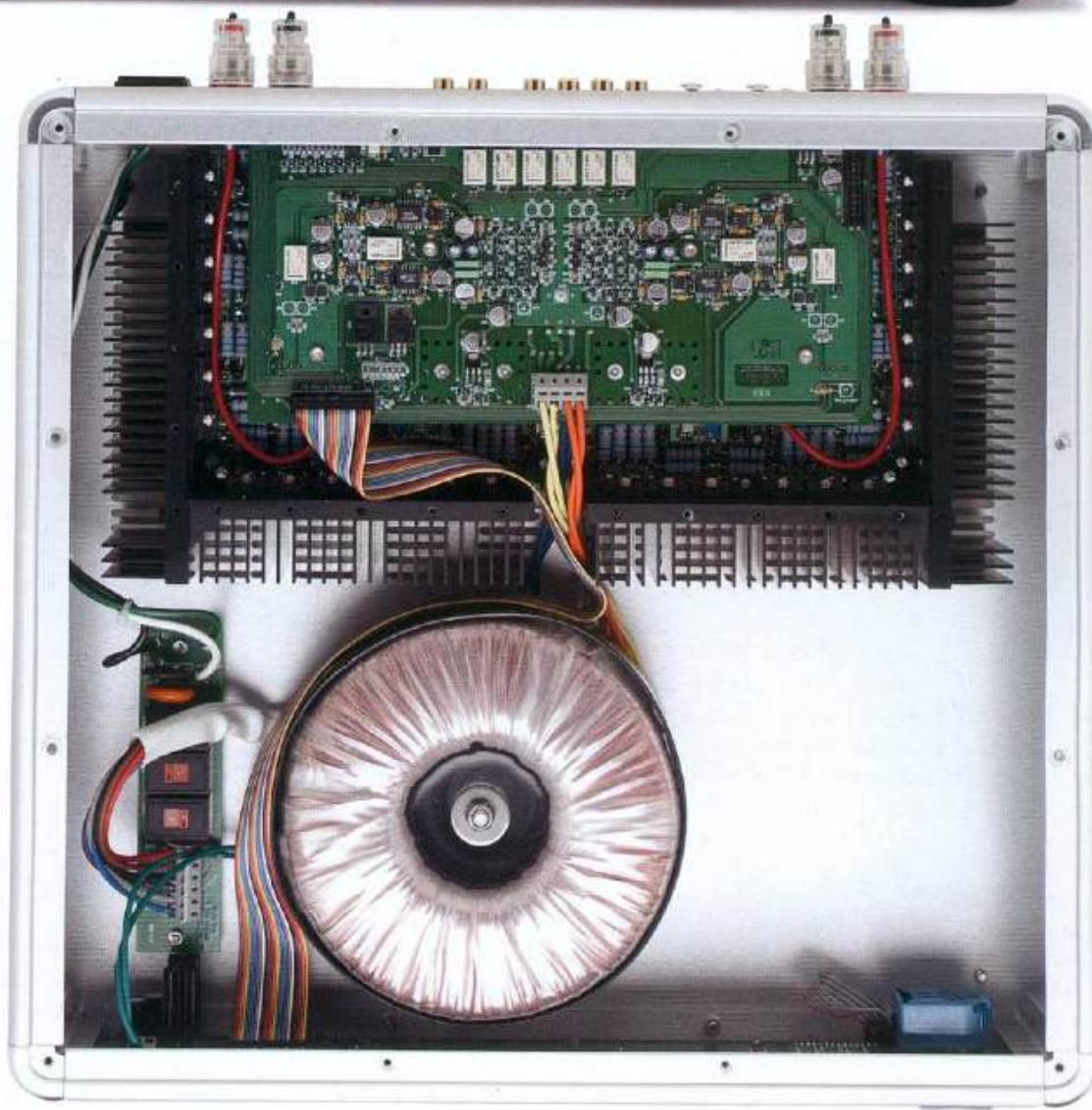
Knowing Krells of old this amplifier got a good burn-in period; a full week in fact and then it was time for a quick check in the laboratory. The KAV stormed through. They claim 200 watts (8 ohm load) and 0.04% distortion and this sample returned a significantly higher output and much lower distortion so nobody is going to get short-changed. Wired into the resident system the Krell just ate my choice of loudspeakers for breakfast; even when I loaded the outputs with an extra pair in another room it hardly broke a sweat. Folks this is an amplifier that delivers that elusive quality "speed" whilst being free of any harshness and the bass is awesome and some more.



This old rocker put on the "Hell freezes over" version of Hotel California and when that first heavy bass note came along it was like being dropped down an elevator shaft; the bass just went down and sucked me down with it. And loud; if your speakers can take it, well this Krell can deliver it.

However before I start talking about how good Led Zeppelin and Primal Scream sounded I should make it clear that the KAV has a gentle side as well. Listening to Ludwig Ruckdeschel's recording "Ave Regina Coelorum" of organ music brought out some immaculately accurate tone colourings revealing the true beauty of the soft flutes and celestes of the St-Anna-Basilika organ. In the same vein the Lammas "So Come to Him" recording of American choristers was presented in a natural gentle listening manner creating an oasis of natural calm. This amplifier can blow your house over but it loses nothing from the music. That said if you are coming from a valve amplifier tradition you may find that there is a slight loss of space and that elusive "Angels dancing on a pin-head" quality for this amplifier is nothing if not accurate.

Overall you may be getting the impression that I like the Krell KAV-400xi. Too true; this really is an amplifier for all seasons and if your existing amplifier is a few years old you owe it to yourself to consider a change. Certainly I'm in no hurry to return this one to Absolute Sounds and I may well have to take the phone off the hook!



FACT FILE

- Frequency Response: 20 Hz–20 kHz, +0 dB, -0.07 dB
- Signal-to-Noise Ratio: 99dB ("A" weighted)
- Total Harmonic Distortion (THD): 1 kHz <0.04%, 20 kHz <0.25%
- Gain: 35.8 dB
- Input Sensitivity: 0.644 volts rms
- Input Impedance: 47 Kohms
- Output Impedance: 0.17 ohms
- Power Consumption: Idle 20 W, Max. 1,800 W
- Inputs: All with Theater Throughput
1 pair balanced via XLR connectors,
3 pair single-ended via RCA connectors
- Outputs: 2 loudspeaker via 5-standard binding posts, 1 pair single-ended preamplifier via RCA connectors
- Tape Input and Output: 1 pair single-ended via RCA connectors
- Output Voltage: Peak to peak maximum 138 volts
- Output Power: 8 Ohms 200 Watts, 4 Ohms 400 Watts
- Remote Control: 1 wireless remote
1 12VDC Out/In (12V trigger)
1 RC-5 input via a DC power connector
- Dimensions: 17.3w x 3.5h x 17d inches
50w x 8.9h x 43.2d cm
- Finishes: Silver Krellcoat™ or luxurious black
- Price £2698.00